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EXAMINER

WASSUM, LUKE S

ART UNIT

PAPER NUMBER

2167

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/448,154

Applicant(s)

GERMSCHIED ET AL.

Examiner

Luke S. Wassum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The Applicants' amendment, filed 4 August 2005, has been received, entered into the record, and considered.

2. As a result of the amendment, claims 1, 3, 6-8, 11, 12, 16 and 18 have been amended.

Claims 1-20 remain pending in the application.

The Invention

3. The claimed invention is an apparatus for and method of using an Internet terminal coupled to the World Wide Web to access an existing proprietary database management system, wherein said accessing does not require the transmission of a user identifier across the Internet, thereby enhancing security. Sign in information from a user (such as a user id and password) is processed only at the Internet terminal, and only a special field indicative of the site specific user validation data is transmitted over the Internet as part of the service request.

Specification

4. Applicant has incorporated by reference numerous co-pending applications at various points in the specification. Examiner notes that incorporation by reference of an application in a printed United States Patent constitutes a special circumstance under 35 U.S.C. § 122 warranting that access of the original disclosure of the application be granted. The incorporation by reference will be interpreted as a waiver of confidentiality of only the original disclosure as filed, and not the entire application file. See *In re Gallo*, 231 USPQ 496 (Comm'r Pat. 1986).

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If Applicant objects to access to the entire application file(s), two copies of the information incorporated by reference must be submitted along with the objection. Failure to provide the material within the period provided will result in the entire application(s) (including prosecution) being made available to petitioner. The Office will not attempt to separate the noted materials from the remainder of the application. See *In re Marsh Engineering Co.*, 1913 C.D. 183 (Comm'r Pat. 1913).

Claim Rejections - 35 USC § 112

5. In view of the amendments to the claims, the examiner withdraws the rejection of claims 3-5, 8-10, 12-15 and 18-20 under 35 U.S.C. § 112, first paragraph.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-4, 6-8, 11-14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Garrison** (U.S. Patent 6,275,939) in view of **De Capitani di Vimercati et al.** ("Access Control in Federated Systems") in view of **Steele et al.** (U.S. Patent 6,282,175).

10. Regarding claim 1, **Garrison** teaches a data processing environment having a user with a user identifier which uniquely identifies said user at a terminal at a particular site and wherein said user utilizes said terminal to generate a particular one of a plurality of service requests requesting access to secure data responsively coupled via a publicly accessible digital data communication network to a database management system having at least one database containing said secure data as claimed, comprising a security profile whereby said database management system permits said terminal to access said at least one database (see col. 4, lines 1-32; see also col. 6, line 60 through col. 7, line 32; see also col. 7, line 50 through col. 8, line 37).

Garrison does not explicitly teach a data processing environment wherein the user accesses the database by transferring a second user identifier which uniquely identifies a particular site without transfer of said user identifier via said publicly accessible digital data communication network, nor including an administration module located within said database management system for permitting a manager having authority to access said administration module to associate a particular security level with each of said plurality of service requests.

De Capitani di Vimercati et al., however, teaches a data processing environment wherein the user accesses the database by transferring a second user identifier which uniquely identifies a particular site without transfer of said user identifier via said publicly accessible digital data communication network (see page 88, col. 2, last paragraph; see also Table 1; see also section 3.2 Authentication, beginning on page 94, all of which teach a mechanism whereby all users accessing a database from a particular site are granted access),

and furthermore including an administration module located within said database management system for permitting a manager having authority to access said administration module to associate a particular security level with each of said plurality of service requests (see extensive discussion of the administration of authorizations, sections 2.3 Administration of Authorizations, page 90, and 2.4 Authorization Specification, page 91, and particularly the following disclosures:

"The federation administrator specifies authorizations to access the federated objects and the access control decision is taken only with respect to these authorizations", page 90, col. 2, last paragraph;

"...access control decisions are taken only with respect to authorizations specified by the local administrator", page 90, col. 2, last sentence, continuing onto page 91; "The federated administrator

specifies global authorizations to access the federated data [and t]he local administrator specifies authorizations to access the local objects", page 91, col. 1, second paragraph under section 2.4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references, since they are all concerned with the same field of endeavor, that is, remotely accessing databases (see **Garrison**, Abstract; see also **De Capitani di Vimercati et al.**, Abstract).

It would have been furthermore obvious to one of ordinary skill in the art at the time of the invention to provide an authentication mechanism whereby the user identifier need not be transmitted via a publicly accessible digital communication network (i.e., global authentication), since the alternative would be to impose local authentication, wherein users are required to re-authenticate themselves at each local site, which may make the access control process very heavy (see **De Capitani di Vimercati et al.**, page 89, col. 2, last paragraph through page 90, col. 1, first paragraph).

Finally, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a mechanism to allow an administrator to configure the requirements for authorization to specific objects in the database by system users, since without such a mechanism all objects would necessarily have the same level of access, there being no mechanism to change said level of access.

Neither **Garrison** nor **De Capitani di Vimercati et al.** explicitly teaches a data processing environment wherein said service request is honored by executing a sequence of command language scripts having an associated security profile.

Steele et al., however, teaches a data processing environment wherein a service request is honored by executing a sequence of command language scripts having an associated security profile (see col. 4, line 57 through col. 5, line 4; see also col. 7, lines 33-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to satisfy service requests through the execution of command language scripts having an associated security profile, since upon receipt of the service request the request can be satisfied merely by executing the corresponding predefined command language script (see **Steele et al.**, col. 7, lines 33-56), without the necessity to first translate the request into a valid SQL command and then submit the SQL command to the database (as is the case in **Garrison**, col. 8, lines 9-19).

11. Regarding claim 6, **Garrison** teaches an apparatus as claimed, comprising:
 - a) a terminal located at a particular location (see col. 4, lines 1-32) having a user with a user identifier which identifies said user (see col. 6, line 60 through col. 7, line 13) and generates a particular one of a plurality of service requests (see col. 7, lines 25-32);
 - b) a database management system having access to a database responsively coupled to said user terminal via a publicly accessible digital data communication network (see col. 4, lines 1-32) and honors said particular one of said plurality of service requests (see col. 7, lines 50-67); and

- c) a security profile generated by said database management system whereby said database management system provides access to a particular secure portion of said database corresponding to said security profile (see col. 7, line 50 through col. 8, line 37).

Garrison does not explicitly teach an apparatus wherein the user accesses the database by transferring a second user identifier which uniquely identifies a particular site without transfer of said user identifier via said publicly accessible digital data communication network, nor including an administration module located within said database management system for permitting a manager having authority to access said administration module to associate a particular security level with each of said plurality of service requests.

De Capitani di Vimercati et al., however, teaches an apparatus wherein the user accesses the database by transferring a second user identifier which uniquely identifies a particular site without transfer of said user identifier via said publicly accessible digital data communication network (see page 88, col. 2, last paragraph; see also Table 1; see also section 3.2 Authentication, beginning on page 94, all of which teach a mechanism whereby all users accessing a database from a particular site are granted access),

and furthermore including an administration module located within said database management system for permitting a manager having authority to access said administration module to associate a particular security level with each of said plurality of service requests (see extensive discussion of the administration of authorizations, sections 2.3 Administration of Authorizations, page 90, and 2.4 Authorization Specification, page 91, and particularly the following disclosures: "The federation administrator specifies authorizations to access the federated objects and the access

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control decision is taken only with respect to these authorizations", page 90, col. 2, last paragraph; "...access control decisions are taken only with respect to authorizations specified by the local administrator", page 90, col. 2, last sentence, continuing onto page 91; "The federated administrator specifies global authorizations to access the federated data [and t]he local administrator specifies authorizations to access the local objects", page 91, col. 1, second paragraph under section 2.4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references, since they are all concerned with the same field of endeavor, that is, remotely accessing databases (see **Garrison**, Abstract; see also **De Capitani di Vimercati et al.**, Abstract).

It would have been furthermore obvious to one of ordinary skill in the art at the time of the invention to provide an authentication mechanism whereby the user identifier need not be transmitted via a publicly accessible digital communication network (i.e., global authentication), since the alternative would be to impose local authentication, wherein users are required to re-authenticate themselves at each local site, which may make the access control process very heavy (see **De Capitani di Vimercati et al.**, page 89, col. 2, last paragraph through page 90, col. 1, first paragraph).

Finally, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a mechanism to allow an administrator to configure the requirements for authorization to specific objects in the database by system users, since without such a mechanism all objects would necessarily have the same level of access, there being no mechanism to change said level of access.

Neither **Garrison** nor **De Capitani di Vimercati et al.** explicitly teaches an apparatus wherein said service request is honored by executing a sequence of command language scripts having an associated security profile.

Steele et al., however, teaches an apparatus wherein a service request is honored by executing a sequence of command language scripts having an associated security profile (see col. 4, line 57 through col. 5, line 4; see also col. 7, lines 33-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to satisfy service requests through the execution of command language scripts having an associated security profile, since upon receipt of the service request the request can be satisfied merely by executing the corresponding predefined command language script (see **Steele et al.**, col. 7, lines 33-56), without the necessity to first translate the request into a valid SQL command and then submit the SQL command to the database (as is the case in **Garrison**, col. 8, lines 9-19).

12. Regarding claim 11, **Garrison** teaches a method of utilizing a user terminal having a first identifier and a user with a user identifier located at a site to securely access a remote database management system having a database via a publicly accessible digital data communication network as claimed, comprising:

- a) signing on to said terminal by said user utilizing said user identifier (see col. 2, line 64 through col. 3, line 2, disclosing that the client transmits a password to the client to

- identify the user of the client system, meaning that the user has necessarily signed on to the client system utilizing a user identifier);
- b) transmitting a service request requiring secure access to said database from said terminal (see col. 6, line 60 through col. 7, line 32; see also col. 7, line 50 through col. 8, line 37);
 - c) receiving said service request by said remote database management system (see col. 6, line 60 through col. 7, line 32; see also col. 7, line 50 through col. 8, line 37);
 - d) determining a security profile (see col. 6, line 60 through col. 7, line 32; see also col. 7, line 50 through col. 8, line 37);
 - e) comparing said security profile with said first identifier (see col. 6, line 60 through col. 7, line 32; see also col. 7, line 50 through col. 8, line 37); and
 - f) honoring said service request if and only if said first identifier corresponds to said security profile (see col. 6, line 60 through col. 7, line 32; see also col. 7, line 50 through col. 8, line 37).

Garrison does not explicitly teach a method wherein the user accesses the database without transfer of said user identifier via said publicly accessible digital data communication network, nor including an administration module located within said database management system for permitting a manager having authority to access said administration module to associate a particular security level with each of said plurality of service requests.

De Capitani di Vimercati et al., however, teaches a method wherein the user accesses the database without transfer of said user identifier via said publicly accessible digital data

communication network (see page 88, col. 2, last paragraph; see also Table 1; see also section 3.2 Authentication, beginning on page 94, all of which teach a mechanism whereby all users accessing a database from a particular site are granted access),

including the transmission of a request of a first identifier from said user terminal (see disclosure on page 89, col. 2, last paragraph, that "Upon reception of the requests by the federation, and furthermore including an administration module located within said database management system for permitting a manager having authority to access said administration module to associate a particular security level with each of said plurality of service requests (see extensive discussion of the administration of authorizations, sections 2.3 Administration of Authorizations, page 90, and 2.4 Authorization Specification, page 91, and particularly the following disclosures: "The federation administrator specifies authorizations to access the federated objects and the access control decision is taken only with respect to these authorizations", page 90, col. 2, last paragraph; "...access control decisions are taken only with respect to authorizations specified by the local administrator", page 90, col. 2, last sentence, continuing onto page 91; "The federated administrator specifies global authorizations to access the federated data [and t]he local administrator specifies authorizations to access the local objects", page 91, col. 1, second paragraph under section 2.4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references, since they are all concerned with the same field of endeavor, that is, remotely accessing databases (see **Garrison**, Abstract; see also **De Capitani di Vimercati et al.**, Abstract).

It would have been furthermore obvious to one of ordinary skill in the art at the time of the invention to provide an authentication mechanism whereby the user identifier need not be

transmitted via a publicly accessible digital communication network (i.e., global authentication), since the alternative would be to impose local authentication, wherein users are required to re-authenticate themselves at each local site, which may make the access control process very heavy (see **De Capitani di Vimercati et al.**, page 89, col. 2, last paragraph through page 90, col. 1, first paragraph).

Finally, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a mechanism to allow an administrator to configure the requirements for authorization to specific objects in the database by system users, since without such a mechanism all objects would necessarily have the same level of access, there being no mechanism to change said level of access.

De Capitani di Vimercati et al. additionally teaches alternative authentication wherein a request is transmitted to the database without any identifier, necessitating the database subsequently transmitting a request for an identifier to be used for authentication (see page 89, last paragraph).

Given the teaching of a system wherein authentication information is transmitted together with a database request, it would have been an obvious variant to transmit the authentication information and database request separately, since this would conserve bandwidth in cases where some database requests could be serviced without authentication.

Neither **Garrison** nor **De Capitani di Vimercati et al.** explicitly teaches a method wherein said service request is honored by executing a sequence of command language scripts having an associated security profile.

Steele et al., however, teaches a method wherein a service request is honored by executing a sequence of command language scripts having an associated security profile (see col. 4, line 57 through col. 5, line 4; see also col. 7, lines 33-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to satisfy service requests through the execution of command language scripts having an associated security profile, since upon receipt of the service request the request can be satisfied merely by executing the corresponding predefined command language script (see **Steele et al.**, col. 7, lines 33-56), without the necessity to first translate the request into a valid SQL command and then submit the SQL command to the database (as is the case in **Garrison**, col. 8, lines 9-19).

13. Regarding claim 16, **Garrison** teaches an apparatus as claimed, comprising:
- a) permitting means located at a site having a first identifier for permitting a user having a user identifier to interact with a database responsively coupled via a publicly accessible digital data communication network (see col. 4, lines 1-32);
 - b) means responsively coupled to said permitting means via said publicly accessible digital data communication network for offering data processing services involving access to said database in response to said service request (see col. 6, line 60 through col. 7, line 32; see also col. 7, line 50 through col. 8, line 37); and
 - c) means responsively coupled to said offering means for preventing said offering means from offering said data processing services to said user in response to said service request unless said site corresponds to a security profile wherein said security profile

permits access to said database (see col. 6, line 60 through col. 7, line 32; see also col. 7, line 50 through col. 8, line 37), wherein the existence of the security profile renders the claimed administration module inherent, since the only claimed functionality of the administration module is to maintain the security profile, and the reference teaches the maintenance of a security profile at col. 7, lines 50-67 and col. 10, lines 5-17.

Garrison does not explicitly teach an apparatus wherein the user accesses the database without transfer of said user identifier via said publicly accessible digital data communication network, nor including an administration module located within said database management system for permitting a manager having authority to access said administration module to associate a particular security level with each of said plurality of service requests.

De Capitani di Vimercati et al., however, teaches an apparatus wherein the user accesses the database without transfer of said user identifier via said publicly accessible digital data communication network (see page 88, col. 2, last paragraph; see also Table 1; see also section 3.2 Authentication, beginning on page 94, all of which teach a mechanism whereby all users accessing a database from a particular site are granted access),

and furthermore including a means for permitting a manager having authority to access said administration module to associate a particular security level with each of said plurality of service requests (see extensive discussion of the administration of authorizations, sections 2.3 Administration of Authorizations, page 90, and 2.4 Authorization Specification, page 91, and particularly the following disclosures: "The federation administrator specifies authorizations to access the federated objects and the access control decision is taken only with respect to these

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authorizations", page 90, col. 2, last paragraph; "...access control decisions are taken only with respect to authorizations specified by the local administrator", page 90, col. 2, last sentence, continuing onto page 91; "The federated administrator specifies global authorizations to access the federated data [and t]he local administrator specifies authorizations to access the local objects", page 91, col. 1, second paragraph under section 2.4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references, since they are all concerned with the same field of endeavor, that is, remotely accessing databases (see **Garrison**, Abstract; see also **De Capitani di Vimercati et al.**, Abstract).

It would have been furthermore obvious to one of ordinary skill in the art at the time of the invention to provide an authentication mechanism whereby the user identifier need not be transmitted via a publicly accessible digital communication network (i.e., global authentication), since the alternative would be to impose local authentication, wherein users are required to re-authenticate themselves at each local site, which may make the access control process very heavy (see **De Capitani di Vimercati et al.**, page 89, col. 2, last paragraph through page 90, col. 1, first paragraph).

Finally, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a mechanism to allow an administrator to configure the requirements for authorization to specific objects in the database by system users, since without such a mechanism all objects would necessarily have the same level of access, there being no mechanism to change said level of access.

Neither **Garrison** nor **De Capitani di Vimercati et al.** explicitly teaches an apparatus wherein said service request is honored by executing a sequence of command language scripts having an associated security profile.

Steele et al., however, teaches an apparatus wherein a service request is honored by executing a sequence of command language scripts having an associated security profile (see col. 4, line 57 through col. 5, line 4; see also col. 7, lines 33-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to satisfy service requests through the execution of command language scripts having an associated security profile, since upon receipt of the service request the request can be satisfied merely by executing the corresponding predefined command language script (see **Steele et al.**, col. 7, lines 33-56), without the necessity to first translate the request into a valid SQL command and then submit the SQL command to the database (as is the case in **Garrison**, col. 8, lines 9-19).

14. Regarding claims 2 and 13, **De Capitani di Vimercati et al.** additionally teaches a data processing environment wherein a security profile is generated by said data management system (see sections 2.3 Administration of Authorizations, page 90, and 2.4 Authorizations Specification, page 91, disclosing the specification by the federation administrator of authorizations to access federated data, and particularly the following disclosures: "The federation administrator specifies authorizations to access the federated objects and the access control decision is taken only with respect to these authorizations", page 90, col. 2, last paragraph; "...access control decisions are taken

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only with respect to authorizations specified by the local administrator", page 90, col. 2, last sentence, continuing onto page 91; "The federated administrator specifies global authorizations to access the federated data [and t]he local administrator specifies authorizations to access the local objects", page 91, col. 1, second paragraph under section 2.4; see also disclosure that "Federated systems represent one of the new emerging technology for distributed database management and organization", under section 5 Conclusion, page 95).

15. Regarding claims 3, 8, 12 and 18, **De Capitani di Vimercati et al.** additionally teaches an improvement, method and apparatus further comprising a portion of a user identifier whereby said database management system receives an identifier corresponding to said particular site (see page 88, col. 2, last paragraph; see also Table 1; see also section 3.2 Authentication, beginning on page 94, all of which teach a mechanism whereby all users accessing a database from a particular site are granted access through the use of an identifier corresponding to the site, and not an identifier corresponding to the user).

16. Regarding claims 4, 14 and 17, **Garrison** additionally teaches an improvement, method and apparatus wherein said publicly accessible digital data communication network further comprises the Internet (see col. 4, lines 1-32).

17. Regarding claim 7, **Garrison** additionally teaches an apparatus wherein said terminal accesses said data entity by transferring said one of a plurality of service requests to said system (see col. 6, line 60 through col. 7, line 32; see also col. 7, line 50 through col. 8, line 37).

18. Claims 5, 9, 10, 15, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Garrison** (U.S. Patent 6,275,939) in view of **De Capitani di Vimercati et al.** ("Access Control in Federated Systems") in view of **Steele et al.** (U.S. Patent 6,282,175) as applied to claims 1-4, 6-8, 11-14 and 16-18 above, and further in view of **Unisys** ("UNISYS CSG MarketPlace – The Mapper System").

19. Regarding claims 5 and 19, **Garrison, De Capitani di Vimercati et al.** and **Steele et al.** teach an improvement to a data processing environment, method and apparatus substantially as claimed.

None of **Garrison, De Capitani di Vimercati et al.** nor **Steele et al.** explicitly teaches the improvement, method and apparatus wherein said database management system is a legacy database management system.

However, **Unisys** teaches the database management system MAPPER, constituting a legacy database management system (see entire document).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use MAPPER as the database management system, since MAPPER contains many key features that make its use advantageous for users (see **Unisys**, key features under MAPPER Overview, page 3).

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20. Regarding claims 9 and 15, **Garrison, De Capitani di Vimercati et al.** and **Steele et al.** teach an improvement to a data processing environment, method and apparatus substantially as claimed.

None of **Garrison, De Capitani di Vimercati et al.** nor **Steele et al.** explicitly teaches the improvement, method and apparatus wherein said database management system is MAPPER.

However, **Unisys** teaches the database management system MAPPER (see entire document).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use MAPPER as the database management system, since MAPPER contains many key features that make its use advantageous for users (see **Unisys**, key features under MAPPER Overview, page 3).

21. Regarding claim 10, **Garrison** additionally teaches an apparatus wherein said publicly accessible digital data communication network further comprises the World Wide Web (see col. 4, lines 1-32).

22. Regarding claim 20, **Garrison** additionally teaches an apparatus wherein said permitting means further comprises an industry standard personal computer (see col. 4, lines 1-60).

Response to Arguments

23. Applicant's arguments filed 4 August 2005 have been fully considered but they are not persuasive.

24. Regarding the Applicants' argument that the amendments to the claims properly addresses the pending claim rejections under 35 U.S.C. § 112, the examiner finds these arguments persuasive. The examiner has withdrawn the pending claim rejections under 35 U.S.C. § 112.

25. Regarding the Applicants' argument that the newly added claim limitation (having a manager select the appropriate security level for a given service request), the examiner has added rejections to these limitations based on the disclosure of the **De Capitani di Vimercati et al.** reference.

26. Regarding the Applicants' argument that the disclosure that "the alternative would be to impose local authentication, wherein users are required to re-authenticate themselves at each local site..." is not found anywhere in the reference, the examiner respectfully apologizes for misstating the location of the disclosure. Instead of the cited pages 87-88, the correct location of this disclosure is pages 89-90. The typographical error has been corrected in this Office action.

Furthermore, regarding the Applicants' argument that the claimed invention uses local authentication, the examiner respectfully disagrees. The **De Capitani di Vimercati et al.** reference clearly teaches on page 90, first paragraph, that "If local authentication is to be applied, the user will have to type in login and password information for each site involved in the transaction.". In the second paragraph, the reference teaches that "In the global authentication, users are not required to

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authenticate themselves at each local site. Their identity (and/or other information needed for access control) is passed to the site by the federation together with the request."

In other words, local authentication requires explicit submission by the *user* (not the user *terminal*) of id/password information, wherein global authentication passes that information automatically without intervention on the part of the user.

27. Regarding the Applicants' argument that there is no reasonable expectation for success in the combination of the references, the examiner respectfully disagrees.

As stated in the previous Office action, in the field of computer programming, success is assured in the incorporation of a feature into a piece of software. Unlike the chemical or mechanical arts where a given combination of chemicals or design of a part may not achieve the desired results, given a competent software engineer and programmer, any desired functionality can be implemented in any given software application.

Thus, an ordinary artisan can reasonably be expected to successfully incorporate a feature from one software product into another software product.

The Applicants seem to interpret the combination of software features as a matter of installing two software packages on the same computer and expecting them to work together. Such an interpretation is clearly erroneous. The incorporation of features of one software product into another software product would involve a software engineer designing and implementing the features as software enhancements. Any competent software engineer (or team of software engineers) can reasonably be expected to successfully implement enhancements to software.

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28. Regarding the Applicants' argument that the **Garrison** reference fails to teach a security profile generated by the database management system, the examiner finds this argument persuasive.

However, upon further consideration, and in view of the newly added limitations defining the administration module and its functionality, the examiner has rejected the relevant claims under new grounds (*supra*).

29. Regarding the Applicants' argument that the **Garrison** reference fails to teach the site specific user-id, the examiner finds these arguments persuasive.

The previously presented rejections were meant to relate the fact that the **Garrison** reference teaches the transmission of an identifier to the database management system, the fact that the identifier corresponded to a site and not a user having already been addressed in the rejections of the corresponding independent claims as having been taught by the **De Capitani di Vimercati et al.** reference.

However, the Applicants' arguments are well taken. The previous rejection of these claims was not stated as clearly as was possible. As a result, the rejections have been restated, and the prior art cited is now the more explicit disclosure found in the **De Capitani di Vimercati et al.** reference.

30. Regarding the Applicants' argument that the prior art of record fails to teach 'service requests', the examiner respectfully responds that any request made to a database, and requiring said database to perform some action (or service) in order to satisfy said request, would clearly qualify as a 'service request'. Any database management system will necessarily execute a series of system commands in servicing a database request issued by a client.

31. Regarding the Applicants' argument that there would be no motivation nor expectation of success in combining the **Unisys** reference with the other cited references, the examiner respectfully disagrees.

Both the **Garrison** reference and the **De Capitani di Vimercati et al.** reference teaches a system wherein access to data within a database is restricted. Database management software is necessary to interact with a database. The choice of a specific database manager would be based upon the features of different database management systems.

The **Unisys** reference provides details of features that would make its use as a database management system advantageous, and provides ample motivation for one of ordinary skill in the art to utilize MAPPER as the database manager in a system.

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Conclusion

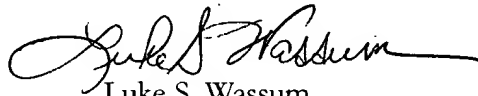
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke S. Wassum whose telephone number is 571-272-4119. The examiner can normally be reached on Monday-Friday 8:30-5:30, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

In addition, INFORMAL or DRAFT communications may be faxed directly to the examiner at 571-273-4119. Such communications must be clearly marked as INFORMAL, DRAFT or UNOFFICIAL.

Customer Service for Tech Center 2100 can be reached during regular business hours at (571) 272-2100, or fax (571) 273-2100.

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Luke S. Wassum
Primary Examiner
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